



Bat Survey Report – Preliminary Roost Assessment

126 Surley Row, Emmer Green, Reading
RG4 8QD

May 2021

Report conditions

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Contents

Summary.....	1
1. Introduction	2
Objectives.....	2
Site Description.....	2
Proposed works.....	2
Limitations.....	3
2. Methods.....	4
Desk study.....	4
Field survey	4
Foraging and commuting habitat	5
3. Results	6
Desk study.....	6
<i>Nationally and locally designated sites and notable habitats</i>	<i>6</i>
<i>Protected species</i>	<i>6</i>
Preliminary roost assessment.....	6
Internals.....	6
Externals	7
4. Discussion	8
Legislation and planning policy	8
Interpretation of habitat context	8
Interpretation of roost suitability.....	9
Recommendations	9
5. Conclusions	10
References	11
Appendix 1 – Photos	12
Appendix 2 – MAGIC map.....	16

Summary

A preliminary bat roost assessment was carried out at 126 Surley Row, Emmer Green, to assess the possible presence or likely absence of bats and bat roosts to support a planning application with Reading Borough Council for extension work.

126 Surley Row is a mid-twentieth-century detached bungalow in Emmer Green. The house is of modern brick construction, with full gable ends to the side elevations and a further gabled extension to the front. It has a pitched roof of heavy plain interlocking concrete tiles over traditional bitumen underfelt.

The house lies in a landscape that presents bat foraging habitat of a range of quality, with the more local residential areas being of low to moderate value to bats, with higher quality bat foraging habitat associated with the more open countryside fields and woodlands to the north of Emmer Green.

Visual bat survey work finds no direct evidence of bat use, either internally or externally. External inspection identifies no features on the building that could support roosting bats or that would allow bats to access other hidden voids or other potential roost locations.

Overall, the house is judged to present negligible roost suitability.

No further survey work is recommended.

In view of the survey findings, it can be concluded that the development is unlikely to result in a breach of the legislation that protected bats and is likely to accord with relevant planning policy with respect to biodiversity.

1. Introduction

Objectives

- 1.1. The purpose of this assessment is to provide information on the possible presence or likely absence of bats at 126 Surley Row, Emmer Green, to support a planning application with Reading Borough Council. Where bat roosts are identified, or where their presence cannot be confidently ruled out, the report sets out an assessment of the impacts to these and where necessary makes recommendations for measures to avoid, mitigate or compensate for impacts to bats as necessary, dependent on the nature and scale of the impacts.

Site Description

- 1.2. 126 Surley Row is a mid-twentieth-century detached bungalow in Emmer Green, a village suburb to the north of Reading, Berkshire. It occupies a corner plot, with the house facing south-west onto Surley Row, and St Barnabas Road to the rear.
- 1.3. The house is of modern brick construction with full gable ends to the side elevations and a further gabled extension to the front. The roof is pitched, with a truss web frame and an offset ridge board. The roof covering is of heavy plain interlocking concrete tiles over traditional bitumen underfelt. There is a deep layer of modern glass fibre insulation laid over a layer of original insulation between the joists.
- 1.4. There are deep soffits of timber and board construction around the externals, and a small brick chimney to the southern corner of the roof. There is a small area of decorative stone cladding to the front (south-west) elevation, and elements of vertical ship-lap timber cladding to several areas of the elevations.
- 1.5. Photos 1 and 2 in Appendix 1 show the front and rear elevations of the house.

Proposed works

- 1.6. The development proposal is for proposed extension works to the roof.

Limitations

- 1.7. All external elevations of the house were fully visible during the survey work. Internally, the house loft was fully accessible.
- 1.8. There are therefore no identified limitations to the survey work.

2. Methods

Desk study

- 2.1. A desk-based assessment was carried out on in May 2021. This used a variety of information. Online ecological data (MAGIC¹) was used to gain information on designated sites and priority habitats within 1km of the site. Aerial photos and Ordnance Survey mapping (again via MAGIC) were used to gain an understanding of the landscape context of the site. MAGIC was also used to identify if any licenses had been granted by Natural England for developments in the search area affecting European protected species (EPS).
- 2.2. A data request from the Thames Valley Environmental Records Centre (TVERC) or the Berkshire and South Bucks Bat Group (BSBBG) was not carried out at this time. Consideration of the value of seeking additional records on the context of the bat use of the site (if present) was taken after the site survey work.

Field survey

- 2.3. A visual bat survey was carried out on 24th May 2021 by Adam Egglesfield of AE Ecology, who holds a current licence to survey bat roosts. Survey methodology used during the work is guided by and consistent with that set out in the Bat Conservation Trust's '*Bat Surveys for Professional Ecologists: Good Practice Guidelines*' 3rd edition, (Collins, J. (ed) 2016).
- 2.4. The house was subject to a detailed internal and external search. The aims of this were to identify evidence of bat activity and/or identify the presence of any features that could potentially support roosting bats or features through which bats could gain access to possible roost locations. External areas were inspected to identify potential bat access points and roosting features. Such features typically include missing, slipped, broken or bowed roof tiles, gaps around fascias and soffits, gaps in brickwork (such as missing mortar or expansion gaps), lifted chimney, roof, or window flashing, and gaps around window and door casements.

¹ Multi-Agency Geographic Information for the Countryside - <http://magic.defra.gov.uk/>

- 2.5. The external inspection also aimed to identify any actual direct evidence of bat use such as droppings adhering to walls, floors or windowsills below gaps, or staining around possible access gaps.
- 2.6. Features were inspected using Opticron Discovery 10x42 close-focusing binoculars and where necessary and safely possible, a ladder. High-powered torches (Clulite Clubman CB2 and Lenser P7.2) were used to illuminate potential roost and roost access features.
- 2.7. Where present and safely accessible, any internal voids and similar spaces were inspected for evidence of bat presence such as live bats, corpses, droppings, feeding remains and staining. The building was subsequently assessed for its suitability to support roosting bats, from 'negligible' to 'high', in line with the survey guidelines.

Foraging and commuting habitat

- 2.8. An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bats. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland, and open water and watercourses, which are highly attractive to bats as both a foraging resource and as commuting routes. The presence of such habitats, particularly in a mosaic or network with other suitable habitat, typically increases the potential for structures to be exploited by bats where suitable roost and access opportunities are present. The presence of unlit semi-natural vegetation and habitat linkages between the site and the surrounding landscape were also considered.

3. Results

Desk study

- 3.1. The map in Appendix 2 shows the location of the site and its surrounding relevant ecological interest features produced from MAGIC.

Nationally and locally designated sites and notable habitats

- 3.2. There are no statutory designated sites such as Site of Special Scientific Interest (SSSI) within the search area.
- 3.3. The main ecological feature in the search area are the pockets of green space and small woodlands within the suburban residential surroundings. There is open countryside and a golf course to the north of the search area, along with other small patches of woodland, some of which are Ancient Woodland (i.e., land that has been continuously wooded for at least 400 years).

Protected species

- 3.4. MAGIC holds one record of a licence having been granted for works involving bats within the search area. This was for a development affecting a non-breeding roost for brown long-eared bats *Plecotus auritus* approximately 500m to the north-east.

Preliminary roost assessment

Internals

- 3.5. Photos 3 and 4 show the general conditions within the loft. Internally, the loft was found to be in good condition. There were no stored household items, allowing full and thorough access throughout. No bat droppings or other evidence of recent or historic roosting activity was noted to any of the floor areas or the horizontal surfaces of the timberwork.
- 3.6. Several spot checks under the new and original insulation were carried out across the loft and no historic bat evidence was seen – see Photos 5 and 6.
- 3.7. The gable end apexes were closely examined; the internal faces of these are sealed with plyboard (Photo 7), which was noted to be tightly fitting to the underside of the roof covering. No bat evidence was found in these areas, or

on the floor beneath the gable apexes - (either on the surface of the insulation, or beneath it (see Photos 8 and 9).

- 3.8. The ridge area and timber joints where the front gable meets the main ridge were closely examined and no evidence of recent or historic bat roosting activity noted (Photos 10 and 11).
- 3.9. The rendered chimney breast was examined, and no historic or recent bat roosting activity noted (Photo 12). Moderate levels of cobwebs were found around the chimney, and around various apexes and corners of the loft. None of these were found to have bat droppings adhering to them.
- 3.10. The underfelt was in good condition and no areas of external light noted.

Externals

- 3.11. Externally, the heavy concrete roof tiles were in good condition, closely fitting and tight, with no significant areas of damage, and no missing tiles – see photos 13 and 14. The flashing around the chimney was found to be in good condition (Photo 15). The ridge tiles were found to be well fitting with no gaps noted to the bedding mortar.
- 3.12. The soffits were generally tight to the external walls; some small areas of gapping were noted, but these were considered too small to allow bat access. Cobwebs were noted to be present in these areas across these small gaps. See Photos 16 and 17.
- 3.13. The verge mortar was found to be in good general condition (Photo 18), with the exception of the south-eastern gable end where there was a small area of deterioration. Close examination of this area using a ladder and torch found no evidence of bat roosting activity - the larger gap had an old bird nest blocking the majority of the void, while cobwebs were present across the smaller gap (Photos 19 to 21).
- 3.14. The timber weatherboarding was found to be in good condition with no warping or damage, and no gaps either between the lapped boards or around the top edges where they meet the soffits. See Photos 22 to 24.
- 3.15. No evidence of recent or historic bat roosting activity was noted to any of the external features.

4. Discussion

Legislation and planning policy

4.1. Bats are legally protected under both domestic and international law (the Wildlife and Countryside Act 1981 (as amended)² and the Conservation of Habitats and Species Regulations 2010 (as amended)³ respectively). All native bat species are European Protected Species (EPS). This legislation makes it an offence to kill, injure or disturb bats, or to destroy or damage their roosts, even when the bats are not present.

4.2. Paragraph 175 of the National Planning Policy Framework (NPPF) (MHCLG, 2018) requires that when determining planning applications, if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then permission should be refused.

4.3. Policy CS36 'Biodiversity and Geology' of the Reading Borough Council Adopted Core Strategy (revised 2015) states that:

"Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes."

4.4. The supporting text to the policy states that

"Protected species identified by the Species Action Plan of the Reading Biodiversity Action Plan (BAP) and their habitats must also be protected from any direct or indirect harm resulting from development."

Interpretation of habitat context

4.5. The habitat around the site is dominated by mature residential development. Although this is not typically higher-quality bat foraging or commuting habitat, the network of gardens, street trees, and small patches of urban woodland and green space do provide a reasonable habitat resource for bats more adapted to urban environments. Overall, it would be considered that the

² <http://www.legislation.gov.uk/ukpga/1981/69>

³ <http://www.legislation.gov.uk/uksi/2010/490/contents/made>

immediate area is of low to moderate quality as a bat foraging resource, while the open countryside to the north would provide higher-value habitat that may support a wider diversity of species and is within dispersal distance from the site.

Interpretation of roost suitability

- 4.6. Internally, the main loft space presents suitable roosting locations due to the timber beams and other construction features. However, no evidence of historic or recent bat use was seen in any areas. No potential access points were noted into the loft.
- 4.7. It is confidently concluded that the loft does not support roosting bats, nor is there evidence to suggest that there have historically been bats roosting within the loft.
- 4.8. The external features were found to be in generally good condition and no potential roost access opportunities were identified in any areas across the main roof faces, ridge tiles, soffits, or weatherboarding. The only potential roost feature identified was a small area of damage to the lower edge of one of the gable verges; however, there was no evidence of bat activity in this area and the holes had debris to the opening, indicating that bats were not accessing these.
- 4.9. Overall, it is concluded that 126 Surley Row offers low bat roost suitability due to the small area of hanging tiles, but the loft and roof areas, including all areas affected by the development, offer negligible roost suitability.
- 4.10. It is confidently concluded therefore, that the development proposals at 126 Surley Row are unlikely to affect bats or bat roosts.

Recommendations

- 4.11. As it is concluded that the development is unlikely to affect bats, there is no recommendation for any further bat survey work.

5. Conclusions

- 5.1. 126 Surley Row lies in a landscape that presents bat foraging habitat of a range of quality, with the more local residential areas being of low to moderate value to bats, with higher quality bat foraging habitat associated with the more open countryside fields and woodlands to the north of Emmer Green.
- 5.2. Visual bat survey work found no direct evidence of bat use, either internally or externally. External inspection identified no features on the building that could support roosting bats or that would allow bats to access other hidden voids or other potential roost locations.
- 5.3. Overall, the house was judged to present negligible roost suitability.
- 5.4. The proposed development will not adversely affect bats or bat roosts.
- 5.5. No further survey work is recommended.
- 5.6. In view of the survey findings, it can be concluded that the development is unlikely to result in a breach of the legislation that protected bats and is likely to accord with relevant planning policy with respect to biodiversity.

References

- Chartered Institute of Ecology and Environmental Management (CIEEM). (2013), *Guidelines for Preliminary Ecological Appraisal*. CIEEM; Winchester.
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. Bat Conservation Trust; London.
- MHCLG, (2018). *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government; London.
- Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature; Peterborough.

Appendix 1 – Photos



Photo 1 Front of house



Photo 2 Rear of house



Photo 3 General conditions in main loft



Photo 4 General conditions in main loft



Photo 5 Loft floor insulation



Photo 6 Spot checks beneath insulation



Photo 7 Gable end apex



Photo 8 Top of insulation below gable end



Photo 9 Floor beneath gable apex



Photo 10 Ridge timbers

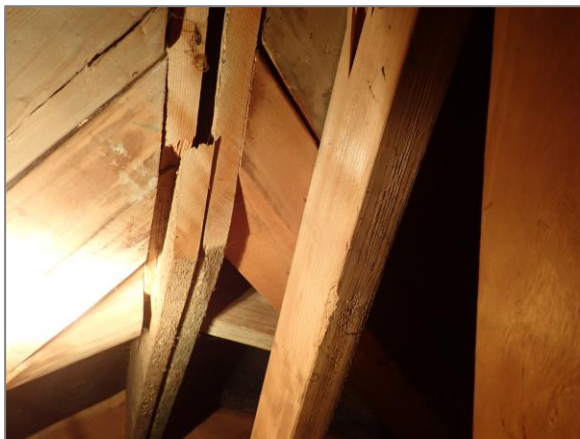


Photo 11 Apex timberwork



Photo 12 Chimney breast within loft



Photo 13 *Roof tiles*



Photo 14 *Roof tiles*



Photo 15 *Chimney flashing*



Photo 16 *Soffit*



Photo 17 *Soffit*



Photo 18 *Verge mortar in good condition*



Photo 19 Verge mortar in good condition



Photo 20 Gap to verge mortar



Photo 21 Cobwebs within gap

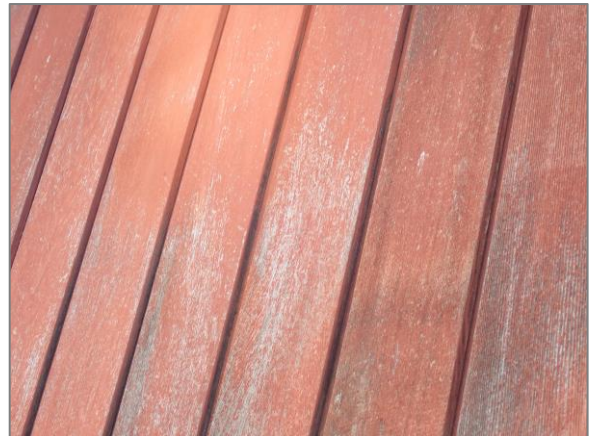


Photo 22 Timber cladding



Photo 23 Timber cladding

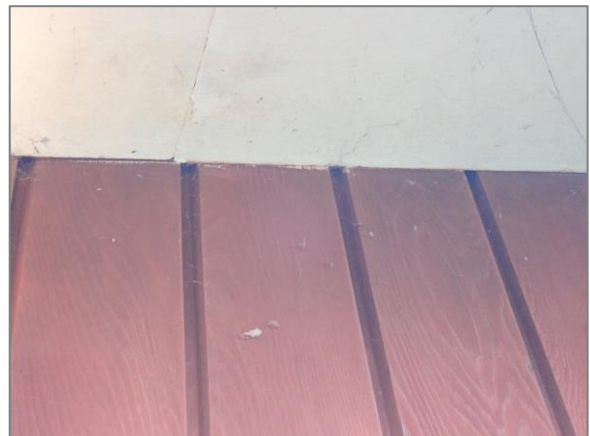


Photo 24 Timber cladding

Appendix 2 – MAGIC map

